PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Leadership and management in the undergraduate medical curriculum: A qualitative study of students' attitudes and opinions at one UK medical school.
AUTHORS	Quince, Thelma; Abbas, Mark; Murugesu, Sughashini; Crawley, Francesca; Hyde, Sarah; Wood, Diana; Benson, John

VERSION 1 - REVIEW

REVIEWER	Prof. Peter Spurgeon
	Medical School, University of Warwick
	UK
REVIEW RETURNED	29-Apr-2014

GENERAL COMMENTS	The paper deserves to be published for attempting to highlight an important issue.
	There are two or three issues I feel should be addressed. Authors omit major source of guidance to U-G Schools (Spurgeon & Down, Institute of Innovation & Improvement). There is also the conceptual issue of asking medical students about what and how they should be taught about management and leadership when they have little understanding of the topic. The parallel would be asking students, would you like anatomy or pharmacology taught and how? If management and leadership is in the curriculum, tutors should be brave enough to teach it!

REVIEWER	Maha Maryame Khan
	North Western Deanery, England
REVIEW RETURNED	05-May-2014

GENERAL COMMENTS	The abstract and discussion are of good length and well-written, however, the remainder of the paper requires general improvement.
	The standard of written English is clumsy throughout, with frequent use of terms which require clarification, for example, in the abstract results section (p2, lines 21-26) the opening line is overly-long. The points require clarification as it is otherwise difficult to follow specific outcome measures.
	The results (and corresponding abstract and summary sections) do not express and statistical significance and numerical data to support claims is particularly lacking. This, I understand, is challenged by the small sample size. One way of working with a

small sample size is to use phrases such as 'a majority' or 'over one-half'; tests such as the student t test may be useful here. There is much repetition, and to express the results as 'some students...other students' does not convey the interim step of a results section which should elegantly lead to a discussion of the data presented. This makes the results section, and subsequently the discussion section, difficult to read. It is a shame, as the discussion section is otherwise one of the stronger points of the paper.

The discussion section does require improvement, by reflecting points back to those outlined in the introduction, introducing more relevant papers, and as a discussion section ought to, discussing the findings of the paper in question as compared with existing literature.

On the whole, the paper is long and arduous. It makes for difficult reading. However, it has great potential if re-written with a higher standard of English, most sections (particularly the methods and results sections) contracted to eloquently express salient points, and visual aids such as tables, charts and diagrams used to supplement or replace methods and results data.

There is great potential here, and I would be delighted to review the paper once the feedback has been incorporated.

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Reviewer Name Prof. Peter Spurgeon

Institution and Country Medical School, University of Warwick

UK

Please state any competing interests or state 'None declared': None declared

The paper deserves to be published for attempting to highlight an important issue.

There are two or three issues I feel should be addressed. Authors omit major source of guidance to U-G Schools (Spurgeon & Down, Institute of Innovation & Improvement).

We have included this reference. The study began before the publication of this document. Three of the authors of this paper were contributors to it (JB, DW and MA). It was not the intention of the research to examine the extent to which our students' comments mapped onto the suggestions made in this document.

There is also the conceptual issue of asking medical students about what and how they should be taught about management and leadership when they have little understanding of the topic. The parallel would be asking students, would you like anatomy or pharmacology taught and how? If management and leadership is in the curriculum, tutors should be brave enough to teach it!

From a conceptual view we believe that "the student's voice" should be heard, regardless of the background of the students. Two further points can be made. First all of the year 6 students who participated had received some formal leadership and management education. Second, many participants drew on other experience, gained either through work experience or by involvement in college or other activities and therefore had some exposure to leadership and management.

Reviewer: 2

Reviewer Name: Maha Maryame Khan

Institution and Country North Western Deanery, England

Please state any competing interests or state 'None declared': None declared

The abstract and discussion are of good length and well-written, however, the remainder of the paper requires general improvement.

The standard of written English is clumsy throughout, with frequent use of terms which require clarification, for example, in the abstract results section (p2, lines 21-26) the opening line is overly-long. The points require clarification as it is otherwise difficult to follow specific outcome measures.

The results (and corresponding abstract and summary sections) do not express and statistical significance and numerical data to support claims is particularly lacking. This, I understand, is challenged by the small sample size. One way of working with a small sample size is to use phrases such as 'a majority' or 'over one-half'; tests such as the student t test may be useful here.

We would challenge strongly the view that any sort of statistical analysis of the results is appropriate given the types of qualitative methodology employed. In support of our view we would like to cite Malterud K.(2001) Qualitative research: standards, challenges and guidelines. The Lancet; 358:483-487

There is much repetition, and to express the results as 'some students...other students' does not convey the interim step of a results section which should elegantly lead to a discussion of the data presented. This makes the results section, and subsequently the discussion section, difficult to read. It is a shame, as the discussion section is otherwise one of the stronger points of the paper.

We have revised large sections of the results section of the paper, so as to remove repetition. We have provided a series of diagrams (figures) which illustrate the relationships between overarching themes, initial codes and the detailed suggestions and opinion given by the participants.

The discussion section does require improvement, by reflecting points back to those outlined in the introduction, introducing more relevant papers, and as a discussion section ought to, discussing the findings of the paper in question as compared with existing literature.

We have revised parts of the discussion to link more closely with the introduction. However there is a dearth of literature relating specifically to the attitudes and opinions about leadership and management education held by UK undergraduate medical students. (Comparisons with studies undertaken in the USA are questionable not only because of differences in the structure and organisation of healthcare provision but also because of differences in medical education. Similarly, studies evaluating leadership and management educational initiatives at postgraduate level are also of limited value in this context.)

On the whole, the paper is long and arduous. It makes for difficult reading. However, it has great potential if re-written with a higher standard of English, most sections (particularly the methods and results sections) contracted to eloquently express salient points, and visual aids such as tables, charts and diagrams used to supplement or replace methods and results data.

As indicated we have re-written large sections of the paper which has reduced the number of words. We acknowledge that the paper is rather long. In part this is because of the large number of quotes given. We have reviewed the quotes and removed some. However we believe that in qualitative work it is important to illustrate the richness of the data.

There is great potential here, and I would be delighted to review the paper once the feedback has been incorporated.	